

## REMARKS

### I. The Pending Claims and the Amendments To the Claims

The amendment of Page 15 of the specification is to correct an obvious typographical error in that the symbol for “micrometer” was erroneously set forth as “□m” when it should have been set forth as ---µm---. Appropriate correction has been made at the various locations in the paragraph as amended.

With the entry of the claim amendments set forth above, Claims 1-20 are pending, with Claims 1, 6, 16, and 19 being the pending independent claims, and Claims 2-5, 7-15, 17, 18, and 20 being the pending dependent claims. Claims 5, 6, 7, and 8 have been amended, and Claim 20 is new.

Claim 5 is amended by deletion of excess language which is an obvious typographical error. Claim 6 is amended by deletion of the recitation of the substrate as comprising foam. Support for this amendment can be found in the specification at, for example, Page 5 lines 11 through 14. Claim 7 is amended by changing “foam substrate comprises polystyrene” to ---substrate comprises foam---. Support for this amendment can also be found in the specification at, for example, Page 5 lines 11-14. The amendment of Claims 6 and 7 necessitated amending Claim 8 so that it depends from Claim 7 rather than from Claim 6. Newly-presented Claim 20 recites the substrate as comprising polystyrene. Support for this amendment can also be found in the specification at, for example, Page 5 lines 11-14.

The amendments to the specification and claims include no new matter.

## II. The Rejection of Claims 1-5 as Anticipated by Beuzelin

In Section 6 of the 17 September 2004 Office Action, Claims 1-5 are rejected under 35 USC 102(b) as unpatentable over GB 2288177A to Beuzelin et al ("BEUZELIN et al"). The Office Action states that BEUZELIN et al teaches a sheet having the layers:

Polystyrene/binder/ethylene-vinyl alcohol/binder/polyethylene,  
with the sheet having a thickness of 790 microns and the polystyrene having a thickness of 600 microns. The Office Action goes on to state that the polystyrene component may contain various amounts of maleic anhydride modified polystyrene, referring to the A1 resins in Table 5 on Page 27 of BEUZELIN et al. The Office Action refers to Example 4 in Table 5 on Page 27 of BEUZELIN et al, and states that taking the 5 parts of Impact PS 1 g MA together with the 35 parts Impact PS 1 as an example, the content of the polystyrene/modified polystyrene resin compared to the content of the EVA is  $(5+35)/60$  or 0.67:1. The Office Action goes on to state that anhydride-grafted styrene/diene block copolymers are taught at page 3 lines 13-24 and page 5 lines 24-27 of BEUZELIN et al.

In response, Applicants contend that Claims 1-5 are patentable over BEUZELIN et al. More particularly, Applicants acknowledge that BEUZELIN et al discloses a 790 micron structure in Table 3, and that this structure has the five layers:

polystyrene/binder/EVOH/binder/polyethylene.

Table 3 on Page 23 of BEUZELIN et al provides the thickness of each of the layers, in microns, as 600/30/30/30/100, respectively. These thicknesses apply to Examples 1-5 in Table 5, as stated on Page 24 lines 5-28. In the 5-layer structure, the Office Action states that the "polystyrene component" may contain various amounts of maleic anhydride modified

polystyrene, and refers specifically to the A1 resins in Table 5 at Page 27 of BEUZELIN et al. However, contrary to the Office Action, the A1 resin is not in the "polystyrene component", i.e., the A1 resin is not in the first layer of the 5-layer structure. Rather, the A1 resins in Table 5 page 27 of Beuzelin are identified under the heading "Constituents of the *extrusion binder*". The extrusion binder layer correlates with the 30 micron "binder subjected to the test" language of Table 3, of which there are two in the 5-layer structure, i.e., the second and fourth layers of the 5-layer structure. In Example 4 in Table 5 the "styrene-based polymers" are present in each of the *binder* layers at a level of  $5\% + 35\% = 40\%$ . Each of the two binder layers makes up  $30/790 \times 100 = 3.8\%$  of the total "film" thickness, for a total of 7.6% of the total "film" thickness. 40% of 7.6% is only 3.04%, which of course is not even close to the "at least 35 weight percent of the film, based on total film weight" recited in Applicants' independent Claim 1. Also, this analysis combines the styrene-based resin in the two binder layers, thereby doubling the amount of styrene-based resin in either of the binder layers considered alone.

Even if the above analysis is modified by ignoring the thick polystyrene layer (i.e., by considering it to be a substrate layer even though it is coextruded, i.e., considering only the four thinner layers as the "film"), the numbers are as follows.  $30/190 \times 100 = 15.8\%$  for each binder layer, with the two binder layers taken together therefore making up a total of 31.6% of the total film thickness. Since the styrene-based polymer makes up only 40% of each of the binder layers, 40% of 31.6% works out to a styrene-based polymer content of only 12.64% of the total film weight for both binder layers taken together. This 12.64% is still is not even close to Applicants' recited "...outer bonding layer comprising styrene based polymer which makes up at least 35 weight percent of the film, based on total film weight...." As a result, it is clear that

Applicants' Claim 1 is novel over BEUZELIN et al., as BEUZELIN et al does not teach or suggest nearly enough styrene-based polymer in the binder layers to meet Applicants' recited feature of "...an outer bonding layer comprising styrene based polymer which makes up at least 35 weight percent of the film, based on total film weight...."

The calculations in the Office Action err in comparing the styrene-based resins against the maleic anhydride grafted EVA in the same layer. The maleic anhydride grafted EVA is the remainder of the binder layer, not the total film weight as recited in Applicants' claims. The final result of "0.67:1" is actually the ratio of the styrene-based resin in the binder layer to the ethylene/vinyl acetate copolymer weight in the binder layer, *not* the ratio of the styrene-based resin in the binder layer to the *total film weight*, as recited in Applicants' claims. Thus, the calculations in the Office Action do not correspond to the language of Applicants' claims.

It should be noted that if the 600 micron outer layer is taken as the polystyrene layer to be compared with the bonding layer, it does not appear to contain the anhydride modified polystyrene, so it too does not meet any of Applicants' claims. The Office Action does not refer to any portion of BEUZELIN et al which discloses a *modified* styrene-based resin in the 600 micron layer. As such, Applicants recited outer bonding layer does not correspond with the 600 micron polystyrene layer of BEUZELIN et al. Thus, it is clear that the only layers of the BEUZELIN et al 5-layer structure which correspond with Applicants' recited bonding layer comprising modified styrene-based polymer are layers 2 and 4 of the 5-layer structure disclosed in BEUZELIN et al.

Based on all of the arguments set forth above, Applicants contend that Claims 1-5 are patentable over BEUZELIN et al.

III. The Rejection of Claims 1-19 as Obvious over GUSAVAGE et al  
in view of BEUZELIN et al

In Section 9 of the 17 September 2004 Office Action, Claims 1-19 are rejected under 35 USC 103(a) as unpatentable over EPO 0707955A1, to Gusavage et al ("GUSAVAGE et al"). The Office Action states that GUSAVAGE et al teaches trays of foamed polystyrene having covering films containing styrene/butadiene layers as films having the layer arrangement of sealant/barrier/bonding, and that BEUZELIN et al is applied as in the §102 rejection and that BEUZELIN et al teaches that the sheets are easily cut. The Office Action concludes that it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the films of BEUZELIN et al on the trays of GUSAVAGE et al in order to facilitate construction of the trays by making cutting of the film easier.

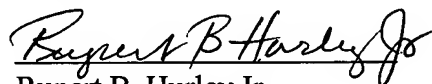
In response, Applicants contend that Claims 1-19 are patentable over GUSAVAGE et al in view of BEUZELIN et al. More particularly, Applicants contend that the Office Action does not set forth a prima facie case of obviousness because the Office Action does not show that BEUZELIN et al teaches or suggests Applicants' recited amount of styrene-based polymer in a bonding layer of the film of BEUZELIN et al. As shown above in response to the §102 rejection, BEUZELIN et al does not teach or suggest enough styrene-based polymer in the bonding layer, regardless of whether the two bonding layers in BEUZELIN et al are considered individually or summed together, and regardless of whether the thick 600 micron polystyrene layer is considered to be part of the film. Thus, employing the "film" of BEUZELIN et al on the trays of GUSAVAGE et al cannot possibly result in Applicants' claimed invention, for at least the same reason that BEUZELIN et al does not teach or suggest a film layer having a styrene-

based polymer which makes up at least 35 weight percent of the film with the styrene-based polymer comprising modified styrene-based polymer present. This is the language of each of Applicants' independent Claims 1, 6, 16, and 19. As such, each of Applicants' Claims 1-19 is patentable over GUSAVAGE et al in view of BEUZELIN et al.

#### IV. Conclusion

Applicants respectfully request reconsideration of the patentability of Claims 1-19, with a view towards allowance.

Respectfully Submitted,



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